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UTAH DIVISION OF
SOLID & HAZARDOUS WASTE

APPLICATION TO PERMIT AND OPERATE A CLASS VI LANDFILL

ONP LLC
(Purgatory Landfill)

Submitted by:

ONP
L.L.C.

LICENSED PROFESSIONAL ENGINEER
No. 173164
BRETT D.
MICKELSON
10/8/04
STATE OF UTAH

Prepared by

IGES, INC.
4153 S. Commerce Drive
Salt Lake City, Utah 84107

October 8, 2004

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INTRODUCTION

This document presents an application to permit and operate a Class VI Construction and Demolition (C&D) landfill in Washington County on land owned by ONP LLC (ONP) and operated by Dixie Waste Services personnel. The proposed Class VI landfill (Landfill) is located southwest of the existing Washington County Class I landfill.

The area to be permitted is in Section 17, Township 42 South, Range 14 West, Salt Lake Baseline and Meridian, Washington County, Utah. Drawing 1 (Appendix A) shows the location of the proposed landfill.

Part I of this document duplicates the standard form outlining General Information pertaining to the site. Part II is a General Report that includes a facility description and landfill operations plan. Part III is the Technical Report and includes details on the design of the site closure, post-closure care and financial assurance.

APPLICATION TO PERMIT AND OPERATE A CLASS VI LANDFILL

ONP L.L.C.
(Purgatory Landfill)

PART I – GENERAL INFORMATION

...t I General Information APPLICANT: PLEASE COMPLETE ALL SECTIONS.

I. Landfill Type		II. Application Type		
☐ Class IVa ☐ Class IVb ☒ Class VI		☐ New Application ☐ Renewal Application		☐ Facility Expansion ☐ Modification

For Renewal Applications, Facility Expansion Applications and Modifications Enter Current Permit Number _____

III. Facility Name and Location

Legal Name of Facility
Purgatory Landfill

Site Address (street or directions to site)				County
275 N Landfill Rd.				Washington
City Washington	State UT	Zip Code 84770	Telephone (435) 673-5610	
Township 42	Range 14	Section(s) 17	Quarter/Quarter Section	Quarter Section
Main Gate Latitude degrees 37 minutes 8 seconds		Longitude degrees 113 minutes 27 seconds		

IV. Facility Owner(s) Information

Legal Name of Facility Owner
ONP LLC

Address (mailing)
P.O. Box 910278

City	State	Zip Code	Telephone
St. George	UT	84791	(435) 673-5610

V. Facility Operator(s) Information

Legal Name of Facility Operator
Dixie Waste Services

Address (mailing)
. Box 910278

City	State	Zip Code	Telephone
St. George	UT	84791	(435) 673-5610

VI. Property Owner(s) Information

Legal Name of Property Owner
ONP LLC

Address (mailing)
605 N. 1300 E.

City	State	Zip Code	Telephone
St. George	UT	84770	(435) 634-0274

VII. Contact Information

Owner Contact	Title
Stacy Hughes	President

Address (mailing)
P.O. Box 910278

City	State	Zip Code	Telephone	Email Address	Alternative Telephone (cell or other)
St. George	UT	84791-0278	(435) 634-0274		

Operator Contact	Title
Cameron Tolman	President

Address (mailing)
605 N. 1300 E.

City	State	Zip Code	Telephone	Email Address	Alternative Telephone (cell or other)
St. George	UT	84770	(435) 673-5610		

Property Owner Contact	Title
Stacy Hughes	President

...ress (mailing)
. Box 910278

City	St. George	State	UT	Zip Code	84791-0278	Telephone	(435) 634-0274
Email Address				Alternative Telephone (cell or other)			

Part I General Information (Continued)

VIII. Waste Types (check all that apply)

Waste Type	Combined Disposal Unit	Monofill Unit
☒ Construction & Demolition	☐	☐
☐ Tires	☐	☐
☒ Yard Waste	☐	☐
☐ Animals	☐	☐
☐ PCB's (R315-315-7(3) only)	☐	☐
☐ Other _____	☐	☐

Note: Disposal of dead animals must be approved by the Executive Secretary

IX. Facility Area

Facility Area	57	acres
Disposal Area	20	acres
Design Capacity		
Years	20	
Cubic Yards	558,000	
Tons	279,000	

X. Fee and Application Documents

Indicate Documents Attached To This Application

☒ Application Fee: Amount $1000.00

☒ Facility Map or Maps ☒ Facility Legal Description ☒ Plan of Operation ☒ Waste Description
☐ Ground Water Report ☒ Closure Design ☒ Cost Estimates ☒ Financial Assurance

Class VI Special Requirements

☐ Documents required by UCA 19-6-108(9) and (10)

I HEREBY CERTIFY THAT THIS INFORMATION AND ALL ATTACHED PAGES ARE CORRECT AND COMPLETE.

Signature of Authorized Owner Representative Stacy Hughes Name typed or printed	Title President	Date
	Address	
Signature of Authorized Land Owner Representative (if applicable) Stacy Hughes Name typed or printed	Title	Date
	Address	
Signature of Authorized Operator Representative (if applicable) Cameron Tolman Name typed or printed	Title President	Date
	Address 605 N. 1300 E. St. George	

APPLICATION TO PERMIT AND OPERATE A CLASS VI LANDFILL

ONP LLC

(Purgatory Landfill)

PART II - GENERAL REPORT

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1.0 - FACILITY DESCRIPTION

The ONP LLC (ONP) Purgatory Landfill (Landfill) is located on land controlled by ONP and will be operated by Dixie Waste Services employees. The Landfill is located as indicated on Drawing 1 (Appendix A). The Landfill will be utilized exclusively for the disposal of construction and demolition (C&D) related waste and the collection and reuse of recyclable materials. The Landfill will function as a Class VI landfill in that it will be a commercial non-hazardous solid waste landfill that accepts Construction and Demolition waste (excludes the acceptance of waste from conditionally exempt small quantity generators). The Landfill is located approximately one half mile southwest of the existing Washington County Landfill facility. The topography surrounding the Landfill is defined by a moderately steep ridge along the site's western boundary transitioning to a moderately sloping outwash plain towards the eastern boundary. Due to the slope of the site, all of the potential site run-on will be directed around the site with the flow directed towards the Virgin River.

The main access road to the site is paved for all-weather access. Access into the Landfill disposal area will be via an improved and maintained dirt road. The facility will be entirely fenced, with public access through the locking gate at the main entrance of the facility.

1.1 AREA SERVED

The Landfill will primarily serve the residents and businesses of Washington County with potential C&D wastes from the Mesquite area. The majority of the solid waste disposal within Washington County takes place at the Washington County Landfill. The Landfill will provide local haulers of C&D wastes a cost effective alternative for the disposal of C&D and expanded opportunities for the reuse of construction derived materials.

1.2 WASTE TYPES

Based upon the existing C&D waste stream being transported by Dixie Waste and estimates of future trends; approximately 900 tons per month of C&D waste is expected to be delivered to the Landfill.

The waste diverted into the Landfill shall be limited to the following wastes:

- Yard Waste – brush, branches, clippings, leaves and grass.
- Construction Wastes – waste generated from construction and includes building materials used in construction. Construction related materials include packaging materials from products, waste lumber, wallboard, boxes from appliances, empty paint cans, empty caulking tubes, and empty sealer and adhesive cans. "EMPTY" means that no more than 10% of the product remains inside the container.
- Demolition Wastes – waste generated from the destruction or remodeling of buildings and houses. Demolition Wastes may include furnaces, pipes, ducting and water heaters. Furniture and other materials that are not part of the building structure must be removed before demolition.
- Untreated wood, including pallets and crates.
- Asphalt from roads and other surfaces.

Wastes materials that are specifically prohibited from Class VI landfills include the following:

- Household Wastes (Municipal Solid Waste)
- Contaminated Soils
- Friable asbestos
- Tanks of any kind
- Railroad ties
- Cardboard not directly generated from construction or demolition activities
- Furniture of all kind
- Metal not directly generated from construction or demolition activities
- Electronics of all kind
- Treated lumber

1.3 FACILITY HOURS

The anticipated operating hours for the facility will be from 10:00 a.m. to 6:00 p.m. year round. The facility will be open Tuesday thru Saturday with the following holidays being observed:

- New Years Day
- Human Rights Day
- Presidents Day
- Memorial Day
- July 4th
- Pioneer Day
- Labor Day
- Columbus Day
- Veterans Day
- Thanksgiving Day
- Christmas Day

The following facility information will be posted at the gate:

- Landfill Owner
- Days of Landfill Operation
- Hours of Landfill Operation
- Instructional Signs (no scavenging, no hazardous materials, dump in designated areas, etc.)
- Emergency Telephone Numbers

1.4 LANDFILL EQUIPMENT

The following equipment will be on site and utilized in landfill operations:

- Track Loader

1.5 LANDFILL PERSONNEL

The following briefly presents the responsibilities for the proposed landfill personnel:

Landfill Supervisor - The Supervisor will be responsible for all matters relating to the Solid Waste Program for the Landfill; including landfill operations and all recycling functions. The

Supervisor will be responsible that the Landfill operations meet all Department of Solid and Hazardous Waste (DSHW) permit requirements. The Supervisor will conduct regular facility inspections and monitor all landfill activities. The Supervisor will be responsible for all operational documentation including the annual reports to DSHW. The Supervisor will be responsible for all persons on the site including visitors.

Landfill Technicians – The Landfill Technicians will be responsible for all day-to-day activities at the Landfill. These responsibilities will include, waste acceptance and placement, traffic control, visual inspection of incoming waste, random waste screening operations, and general construction as is pertains to landfill operations. The Landfill Technicians will serve as both equipment operators and gate attendants.

2.0 - LEGAL DESCRIPTION

A copy of the legal description is included on the survey drawing (Appendix B).

3.0 – OPERATIONS PLAN

The Operation Plan for the Landfill has been written to address the requirements of Utah State Solid Waste Regulations and describes the proposed operations at the facility.

The following section details the operational specifics of the Landfill. Forms used to document the operations of the Landfill are included in Appendix C.

3.1 SCHEDULE OF CONSTRUCTION

The construction and operation of the Landfill has been broken down into two Phases as indicated on Drawing 3 (Appendix A); Phase A will consist of the development and filling of the first three cells. Phase A will include all site development activities including water diversion structures and site support facilities. Soil excavated from Cell 1 will be utilized for the general site grading of the support area, creation of site access roads and water diversion and retaining structures. As Cell 1 begins accepting C& D wastes; Cell 2 will be excavated to provide cover soil for the Cell 1 operations. Excess excavated soils from Cell 2 will be stockpiled for use as final cover. Cell 3 will be developed in the same manner with excavated soils being utilized for operational cover or stockpiled for future use.

Phase B will be developed by excavating the Cell 4 area. Soils from Cell 4 will be utilized as final cover for the Phase A area. Excess soil from Cell 4 will be stockpiled for use in the final cover of the Phase B area. As Cell 4 begins to accept waste; Cell 5 will be excavated to provide operational cover soils. Cell 6 will be developed in the same manner with excavated soils being utilized for operation cover or stockpiled for future use. The Landfill will be constructed and commence operations following legislative approval.

The excavation depth of each Cell may vary due to the actual depth of soil overlying the bedrock. The excavated surfaces indicated on Drawing 5 (Appendix A) are approximate only since the depth to bedrock will vary across the site. The actual depth of excavation for each Cell

is not crucial in the design or operation of the facility as long as the minimum 2% bottom slope and maximum 3:1 side slopes are maintained.

The operation of the Landfill will be continual in nature, the Phased arrangement is more of a design concept rather that actual operational milestones. Based on the projected waste stream, Phase A will provide operational airspace for approximately 11 to 12 years, with design capacity being reached in 2016 or early 2017. Phase B will commence operation in approximately 2017 and last until approximately the year 2025. The landfill capacities are initially based upon a C&D waste stream starting at approximately 11,000 tons per year and escalating at 2% each year thereafter.

3.2 DESCRIPTION OF WASTE HANDLING PROCEDURES

3.2.1 General

The waste control program is designed to detect and deter attempts to dispose of hazardous, municipal solid waste or other unacceptable wastes at the Landfill. The program is designed to protect the health and safety of employees, customers, and the general public, as well as to protect against the contamination of the environment.

The Landfill will be open for public and private disposal. Signs will be posted at the Landfill access point to clearly indicate (1) the types of wastes that are accepted at the C&D facility; (2) the types of wastes not accepted at the site; and (3) the penalty for illegal disposal. The following waste handling procedure will be followed to minimize the potential for non C&D waste being incorporated in the Landfill:

- All vehicles delivering wastes to the site will be met at the gate or working face by a Landfill Technician. The Landfill Technician will inquire as to the contents of each incoming load and enter the description of the vehicle and waste content into the Daily Log.
- The vehicle will be directed to the drop off facility (for recyclables), working face (for C&D), Washington County Landfill operations (for MSW), or rejected due to unacceptable materials.

- Any vehicle suspected of carrying unacceptable materials (liquid waste, sludges, or hazardous waste) will be prevented from entering the disposal areas unless the driver can provide evidence that the waste is acceptable for disposal at the site. ONP reserves the right to refuse service to any suspect load. Vehicles carrying unacceptable materials will be required to exit the site without discharging their loads.
- Loads will be regularly surveyed at the tipping area. If a discharged load contains inappropriate or unacceptable material, the discharger will be required to reload the material and remove it from the Landfill. If the discharger is not immediately identified, the area where the unacceptable material was discharged will be cordoned off. Unacceptable material will be moved to a designated area for identification and preparation for proper disposal.

No open burning or smoking will be allowed near the work face.

3.2.2 Waste Acceptance Records

A monthly summary of all landfill transactions will be created and kept on file at the Landfill or sent to the ONP offices for storage.

3.2.3 Waste Disposal

The geometry of the Landfill is such that the waste will be pushed upslope into place. The C&D wastes will be dumped at the toe of the work face when possible and spread up the slope in one to two foot lifts, keeping the slope at a typical five to one (horizontal to vertical) configuration.

Work face dimensions will be kept narrow enough to minimize blowing litter and reduce the amount of soil needed for cover.

Typically the track loader will be operated with the bucket facing uphill. Equipment operations across the slope will be avoided to minimize the potential of equipment tipping over. In addition to safety concerns, a toe of slope to crest of slope working orientation provides the following benefits:

- Increases effective compaction.
- Increased visibility for waste placement and compaction.
- More uniform waste distribution.

The wastes will be compacted by making three to five passes up and down the slope. Compaction reduces litter, differential settlement, and the quantities of cover soil needed. Compaction also extends the life of the site, reduces unit costs, and leaves fewer voids to help reduce vector problems. Care will be taken that no holes will be left in the compacted waste. Voids will be filled with additional waste as they develop. Cover soils will be applied to all areas of the active cell at a minimum of every 30 days.

3.2.4 Special Wastes – Wastes Excluded from the Landfill

3.2.4.1 Used Oil and Batteries

Used Oil and Batteries will not be accepted at the Landfill.

3.2.4.2 Appliances

White goods will be accepted at the Landfill and be separated for recycling. All appliances containing refrigerants will be segregated in a separate area and stored until the refrigerant is removed. The appliances will be loaded into a metal bin for recycling. Used cars will not be accepted at the facility.

3.2.4.3 Tires

Tires will not be accepted at the Landfill.

3.2.4.4 Dead Animals

Dead animals will not be accepted at the Landfill.

3.2.4.5 Asbestos Waste

Asbestos waste will not be accepted at the Landfill.

3.2.4.6 Grease By-Products

Grease By-Product wastes will not be accepted at the Landfill.

3.2.4.7 Sewer Sludge

Sewer sludge of any kind (wet or dry) will not be accepted at the Landfill.

3.3 WASTE INSPECTION

3.3.1 Landfill Spotting

Learning to identify and exclude prohibited and hazardous waste from the Landfill is required to maintain the Class VI classification and necessary for the safe operation of the facility. The Landfill Technicians are required to receive initial and periodic hazardous waste screening inspection training. Waste screening certificates of the training received will be kept in the personnel files.

3.3.2 Random Waste Screening

Random inspections of incoming loads will be conducted according to the schedule established by the Landfill Supervisor. If frequent violations are detected, additional random checks will be scheduled at the discretion of the Landfill Supervisor.

If a suspicious or unknown waste is encountered, the Landfill Technician will proceed with the waste screening as follows:

- The driver of the vehicle containing the suspect material will be directed to the waste screening area.
- The waste screening form (Appendix C) will be completed.
- Protective gear will be worn (leather gloves, steel-toed boots, and hard hat).
- The suspect material will be spread out with landfill equipment or hand tools and visually examined. Suspicious marking or materials, like the ones listed below, are investigated further:
  - Containers labeled hazardous

- Material with unusual amounts of moisture
- Biomedical (red bag) waste
- Unidentified powders, smoke, or vapors
- Liquids, sludges, pastes, or slurries
- Asbestos or asbestos contaminated materials
- Batteries
- Other wastes not accepted by the Landfill

- The Landfill Supervisor will be called if unstable wastes that cannot be handled safely or radioactive wastes are discovered or suspected.

3.3.3 Removal of Hazardous or Prohibited Waste

Should hazardous or prohibited wastes be discovered during random waste screening or during tipping, the waste will be removed from the Landfill as follows:

- The waste will be loaded back on the hauler's vehicle. The hauler will then be informed of the proper disposal options.
- If the hauler or generator is no longer on the premises and is known, they will be asked to retrieve the waste and informed of the proper disposal options.
- The Landfill Supervisor will arrange to have the waste transported to the proper disposal site and then bill the original hauler or generator.

A record of the removal of all hazardous or prohibited wastes will be kept in the site operational records.

3.3.4 Hazardous or Prohibited Waste Discovered After the Fact

If hazardous or prohibited wastes are discovered at the Landfill after the hauler has left the premises, the following procedure will be used to remove them:

- Access to the area will be restricted.

- The Landfill Supervisor will be immediately notified.
- The Landfill Technician will remove the waste from the working face if it is safe to do so.
- The waste will be isolated in a secure area of the Landfill and the area cordoned off.
- Local authorities will then be notified as appropriate.

The DSHW, the hauler (if known), and the generator (if known) will be notified within 24 hours of the discovery. The generator (if known) is responsible for the proper cleanup, transportation, and disposal of the waste.

3.3.5 Notification Procedures

The following agencies and people are contacted if any hazardous materials are discovered at the Landfill:

- Landfill Supervisor..... (435) 634-0274
- Executive Secretary, DSHW..... (801) 538-6170
- Washington County Fire Department.....911

A record of conversation will be completed as each of the entities is contacted. The record of conversation will be kept in the site operational records.

3.4 FACILITY MONITORING AND INSPECTION

3.4.1 Groundwater

The Landfill is not required to monitor groundwater.

3.4.2 Surface Water

Run-on diversion structures will be installed around the perimeter of the Landfill site during the initial construction as indicated on Drawing 2 (Appendix A). The diversion structures include both ditches and berms. Potential run-on waters will be prohibited from accessing the working area of the Landfill and diverted towards the Virgin River. Drawing 4 (Appendix A) shows the section view of the storm water diversion ditches and the storm water detention pond.

In general, surface water that falls within the boundary of a Cell's excavation will be routed to the storm water detention pond and be stored on-site until evaporated. All run-off will be directed away from the working face to the storm water detention pond.

Dixie Waste Services staff will inspect the drainage system monthly. Temporary repairs will be made as required to any observed deficiencies until permanent repairs can be scheduled. ONP or a licensed general contractor will repair drainage facilities as required.

3.4.3 Leachate Collection

The Landfill is not required to collect or monitor leachate.

3.4.4 Landfill Gas

The Landfill is not required to monitor landfill gas.

3.4.5 General Inspections

Routine inspections will be necessary to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to release of wastes to the environment or a threat to human health. Landfill Technicians will be responsible for conducting and recording routine inspections of the Landfill facilities according to the following schedule:

- Landfill Technicians (when operating equipment) will perform a pre-operational inspection of all equipment daily. A post-operational inspection will be performed at the end of each shift while equipment is cooling down.
- All equipment will be on a regular maintenance schedule. A logbook will be maintained on each piece of equipment and any repairs and comments concerning the inspection will be recorded in the log.

- Facility inspections will be completed on a quarterly basis. Any needed corrective action items will be recorded and the Landfill Technicians will complete any needed repairs. If a problem is of an urgent nature, the problem will be corrected immediately.

3.5 CONTIGENCY AND CORRECTIVE ACTION PLANS

The Washington County Fire Department will be contacted in all cases where hazardous materials are suspected to be involved. The following sections outline procedures to be followed in case of fire, explosion, run-on/run-off contamination, or suspected groundwater contamination:

3.5.1 Fire

The potential for fire is a concern in any landfill. The Landfill will follow a waste handling procedure to minimize the potential for a landfill fire. If any load comes to the facility on fire, the driver of the vehicle will be directed to a pre-designated area away from the working face. The burning waste will be unloaded, spread out, and immediately covered with sufficient amounts of soil to smother the fire. Once the burning waste cools and is deemed safe, the material will then be incorporated into the working face. Some loads coming to the facility may be on fire but not detected until after being unloaded at the working face. If a load of waste that is on fire is unloaded at the working face, the load of waste will be immediately removed from the working face, spread out, and covered with soil.

The Washington County Fire Department will be called if it appears that facility personnel and equipment cannot contain any fire. The Washington County Fire Department will also be called if a fire is burning below the disposal surface or is difficult to reach or isolate.

In case of fire, the Landfill Supervisor will be notified immediately. A written report detailing the event will be placed in the operating record within seven days, including any corrective action taken.

3.5.2 Explosion

If an explosion occurs or seems possible, all personnel and customers will be accounted for and the Landfill will be evacuated. A corrective action plan will immediately be evaluated and implemented as soon as practicable.

The Landfill Supervisor will be notified immediately and the Washington County Fire Department will be called. The Executive Secretary will be notified immediately.

3.5.3 Failure of Run-On/Run-Off Containment

The purpose of the run-on/run-off control system is to manage the stormwater falling in or near the Landfill. Were possible, water will be diverted away from the facility by utilizing ditches and berms. These ditches will be inspected on a regular basis and repaired as needed. All precipitation falling near the facility will flow around the site perimeter towards the Virgin River.

If a run-off ditch or berm fails, temporary berms or ditches will be constructed until the permanent run-off structure can be repaired.

Any temporary berms or other structures will be checked at least every 2 hours during the storm event until storm water flow has stopped. Permanent improvements or repairs will be made as soon as practicable.

The Landfill Supervisor will be notified immediately if a failure of the run-off systems is discovered. The event will be fully documented in the operating record, including any corrective actions implemented within 14 days.

3.5.4 Groundwater Contamination

The Landfill will not have groundwater monitoring wells. If groundwater contamination is ever suspected, studies to evaluate the potential contamination will be conducted and the existence and/or extent of contamination will be documented. This program may include the installation of groundwater monitoring wells. A groundwater monitoring program would be developed and corrective action taken as deemed necessary, with the approval of the Executive Secretary.

3.6 CONTINGENCY PLAN FOR ALTERNATIVE WASTE HANDLING

The most probable reason for a disruption in the waste handling procedures at the Landfill will be weather related. The facility may close during periods of inclement weather such as high winds, heavy rain, snow, flooding, or any other weather-related condition that would make travel or operations dangerous. The Landfill may also close for other reasons like fire, natural disaster, etc. In general, the Dixie Waste Services staff will minimize the possibility of disruption of waste disposal services from an operational standpoint.

In case of equipment failure, replacement equipment will be leased to continue operations while repairs to site equipment are being made.

3.7 MAINTENANCE PLAN

3.7.1 Groundwater Monitoring System

The Landfill will be exempt from requirements for groundwater monitoring. As a result, no groundwater monitoring system is planned.

3.7.2 Leachate Collection and Recovery System

The Landfill will be exempt from requirements for leachate collection. As a result, no leachate collection and recovery system is planned.

3.7.3 Gas Monitoring System

The Landfill will be exempt from requirements for a landfill gas monitoring system. No gas collection system is planned.

3.8 DISEASE, VECTOR, DUST, AND LITTER CONTROL

The vectors typically encountered at landfills are flies, birds, mosquitoes, rodents, skunks, and snakes. Due to the rural location of the facility, stray house pets may occasionally be encountered at the landfill. The program for controlling these vectors is as follows:

3.8.1 Insects

The elimination of breeding areas is essential in the control of insects. The facility will minimize the breeding areas by covering the waste with soil at a minimum of every 30 days and maintaining surfaces to reduce ponded water.

3.8.2 Rodents

Reducing potential food sources minimizes rodent populations at the Landfill. Due to the nature of the C&D wastes, no significant numbers of mice or rats are anticipated.

In the unlikely event of a significant increase in the number of rodents at the Landfill, a professional exterminator will be contacted. The exterminator will then establish an appropriate protocol for pest control in accordance with all county, state and federal regulations.

3.8.3 Birds

It is anticipated that the Landfill will have minimal problems with birds due to the nature of the C&D wastes. Good land filling practices of waste compaction, daily covering of working faces, and the minimization of ponded water, and the nature of the waste should alleviated most of the bird related problems. If the occasional need arises, the birds will be encouraged to leave by using cracker and whistler shells.

3.8.4 Household Pets

Because of the Landfill's location, some stray cats and dogs may wander onto Landfill property. If stray animals are encountered (and can be caught), they will be turned over to the animal shelter. If the Landfill Technicians are unable to apprehend the animals, they will be chased off the property.

3.8.5 Wildlife

The Landfill may have a variety of wildlife located on or near the Landfill property. Wildlife may include deer, snakes, foxes, skunks, and coyotes. If problem skunks or snakes are encountered, they will be exterminated. If other site wildlife becomes a problem, the facility will

coordinate with the Division of Wildlife Resources to provide methods and means to eliminate the problem.

In the event that any of these vectors become an unmanageable problem, the services of a professional exterminator will be employed.

3.8.6 Fugitive Dust

The roads leading to the Landfill are paved, however; site access roads to the working face will be improved dirt/gravel road and will need occasional dust control measures. General Landfill activities, site access by vehicles compounded by the occasional high wind may present a fugitive dust problem. If the dust problem elevates above the "minimum avoidable dust level", facility personnel will apply water to the problem areas. A combination of gravel and a dust palliative may be utilized if dust becomes prevalent.

3.8.7 Litter Control

The nature of the C& D waste anticipated to be received at the Landfill is such that it will naturally resist blowing. However; due to the nature of landfilling operations, blowing litter will still be an occasional problem. Landfill personnel will perform routine litter cleanup to keep the Landfill and surrounding properties clear of windblown debris.

Whenever possible, the working face will be placed down wind so that blowing litter is worked into the Landfill face. During windy conditions, landfill personnel will minimize the spreading of the waste to reduce the amount of windblown debris.

3.9 RECYCLING AND MATERIAL REUSE

Material reuse and recycling activities are planned to be conducted in conjunction with the C&D operations. Metals, appliances, wood, and other re-useable or recyclable materials will be accepted at the Landfill. As the recycling markets fluctuate; other recyclable materials may be added to the list of material that the facility accepts.

3.10 TRAINING PROGRAM

As part of the initial training of new employees, site specific training will be required. All on-site personnel will be required to review the approved permit annually.

All personnel associated with the operation of the Landfill receive site specific training annually. The "Sanitary Landfill Operator Training Course" offered by the Solid Waste Association of North America (SWANA) will be required for the Landfill Supervisor. SWANA waste screening will also be required of all Landfill Technicians. Certificates of completion will be kept in personnel files.

Regular safety and equipment maintenance training sessions will be held to ensure that employees are aware of the latest technologies and that good safety practices are used at all times.

3.11 RECORDKEEPING

An operating record will be maintained as part of a permanent record on the following items:

- Number of vehicles entering the Landfill and types of wastes received on a monthly basis.
- Daily logs forms will be submitted to the ONP office for storage.
- Deviations from the approved Plan of Operation.
- Personnel training and notification procedures.
- Random load inspection log.

3.12 SUBMITTAL OF ANNUAL REPORT

ONP will submit a copy of its annual report to the Executive Secretary by March 1 of each year for the most recent calendar or fiscal year of facility operation. The annual report will include facility activities during the previous year and will include, at a minimum, the following:

- Name and address of facility.

- Calendar or fiscal year covered by the annual report.
- Annual quantity, in tons or volume, in cubic yards, and estimated in-place density in pounds per cubic yard of solid waste.
- Annual update of required financial assurances mechanism pursuant to Utah Administrative Code R315-309.
- Training programs completed.

3.13 INSPECTIONS

The Landfill Supervisor, or his/her designee, will inspect the facility to minimize malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or to a threat to human health. These inspections will be conducted on a quarterly basis, at a minimum. An inspection log (Appendix C) will be kept as part of the operating record. This log will include at least the date and time of inspection, the printed name and handwritten signature of the inspector, a notation of observations made, and the date and nature of any repairs or corrective actions. Inspection records will be available to the Executive Secretary or an authorized representative upon request.

3.14 RECORDING WITH COUNTY RECORDER

Plats and other data, as required by the County Recorder, will be recorded with the Washington County Recorder as part of the record of title no later than 60 days after certification of closure.

3.15 STATE AND LOCAL REQUIREMENTS

The Landfill will maintain compliance with all applicable state and local requirements including zoning, fire protection, water pollution prevention, air pollution prevention, and nuisance control.

3.16 SAFETY

Landfill personnel will be required to participate in an ongoing safety program. This program will comply with the Occupational Safety and Health Administration (OSHA), and the National Institute of Occupational Safety and Health (NIOSH) regulations as applicable. This program

will be designed to make the site and equipment as secure as possible and to educate Landfill personnel about safe work practices.

3.17 EMERGENCY PROCEDURES

In the event of an accident or any other emergency situation, the Landfill Technician will immediately contact the Landfill Supervisor and proceed as directed. If the Landfill Supervisor is not available, the Landfill Technicians will call the appropriate emergency number posted by the telephone. The emergency telephone numbers for the facility are:

- Washington County Central Dispatch 911
- Washington County Fire Department ..... (435) 673-4788
- Washington County Sheriff's Office ..... (435) 656-6500
- St. George Hospital ..... (435) 251-1000
- Landfill Supervisor ..... (435) 634-0274

APPLICATION FOR A PERMIT TO OPERATE A CLASS VI LANDFILL

ONP L.L.C.
(Purgatory Landfill)

PART III - TECHNICAL REPORT

TABLE OF CONTENTS

1.0 – ENGINEERING REPORT

1.1 CELL DESIGN

The Dixie Waste Service Reuse Facility (Landfill) has been broken into two Phases, Phase A, and B. The Permit Drawings show the two Phases in relation to the topography of the site. Phase A consists of three Cells (1, 2, & 3) beginning at the northeast area of the site and progressing uphill. The lowest elevation of Phase A is approximately 2,755 feet above mean sea level. Phase A will be completed at an approximate elevation of 2,830 feet.

Phase B will consist of an additional three Cells (4, 5, & 6). Phase B will be constructed immediately southeast of Phase A and extend uphill in a similar manner. The lowest elevation of Phase B is approximately 2,730 and will extend vertically to an elevation of approximately 2,830. The landfill is designed to fill in the undulating site topography and maintain adequate site access and landfill support structures. The layout of the site is as indicated on Drawing 2 (Appendix A).

1.1.1 Fill Method

As described in Section 3.2.3 of Part II – General Report, Waste will be end dumped at the toe of the work face when possible and spread up the slope in one to two foot lifts, keeping the slope at a typical five to one (horizontal to vertical) configuration. The C&D wastes will then be compacted by making three to five passes up and down the slope.

1.1.2 Interim and Final Cover

Interim and final cover will be placed in compliance with the DSHW Class VI requirements. Section R315-305-5 stipulates that timbers, wood, and other combustible waste be covered as needed to avoid a fire. Wastes within the Landfill will be covered with a minimum 6 inch soil cover no less frequently than every 30 days.

1.1.2.1 Final Cover

As specified in Rule R315-305-5 the final cover will consist of a minimum of two feet of soil, the upper six inches of which will be topsoil material capable of sustaining vegetation. The topsoil layer will then be seeded with indigenous grasses and other shallow rooted vegetation.

1.1.3 Final Cover Elevations

As discussed previously, the maximum elevation for the final cover is planned to be approximately 2,830 feet above mean sea level at the highest point. The upper area of the cover will slope at approximately 5% downward to the southeast. All side slopes of the final cover are planned to be a maximum of 4:1 (horizontal to vertical). These slopes will allow for some settlement without compromising the run-off characteristics of the cover soil. Drawing 4 (Appendix A) details the topography of the final cover.

1.2 DESIGN AND LOCATION OF RUN-ON/RUN-OFF CONTROL SYSTEMS

Run-on control ditches (berms) will be installed to intercept potential run-on above all areas of the site. All run-on will be diverted around the site by two run-on ditches (berms). The topography of the site will necessitate the construction of two run-off ditches downhill of the Landfill to direct all potential run-off to a storm water detention pond. The run-off control ditches will be constructed as indicated on Drawing 6 (Appendix A). The existence, location, and cross sectional area of the field located run-on ditches will be verified prior to the acceptance of waste.

The design of all storm water ditches was based on a 25-year 24-hour storm event of 2.14 inches of precipitation, which was obtained from the Utah Climate Center. Using a curve number of 80, time of concentration of 1-hour and Type II rainfall with the TR55 computer software, a peak discharge of 12 cubic feet per second (cfs) was obtained. The cover and surrounding drainage areas were divided into two areas of approximately 26 acres each. Based on our analysis the flow depth in a "V" ditch with 2:1 side slopes would be approximately 1 foot during peak discharge. The location and section view of the run-off control ditches are shown on Drawings 4 & 5 (Appendix A).

1.3 FLOODPLAIN

The closest surface water to the Landfill site is the Virgin River which lies approximately ¾ of a mile southwest of the site. The floodplain associated with the Virgin River is not proximate to the site nor do any perennial streams flow through the site.

1.4 WETLANDS

The proposed Landfill site is in an arid area with no wetlands.

1.5 GROUNDWATER

During the permitting of the Washington County Landfill (located within a mile of the site) 5 holes were drilled, two of which encountered perched groundwater at 42 and 51 feet below the surface. The Washington County Landfill Hydrogeologic Evaluation (Montgomery 1994) stated that other than the perched water stated above; no groundwater was encountered within a depth of 200 feet.

1.6 GEOLOGY

The Washington County Landfill Hydrogeologic Evaluation (Montgomery 1994) summarizes the geology in the vicinity of the Landfill to be primarily the Moenkopi Formation consisting of siltstones, limestones, and shales.

2.0 – CLOSURE PLAN

2.1 CLOSURE SCHEDULE

The Landfill will be closed in the same Phases as the Landfill is developed. Phase 1 of the closure will incorporate the area of Phase A (Cells 1, 2, & 3). As indicated in Part II – General Report, the Phases have been designated to facilitate access, development and design. Based on facility life calculations using a 2 percent growth rate, closure is expected around the year 2025.

2.2 DESIGN OF FINAL COVER

As discussed previously, the final cover will consist of a minimum of two feet of soil, the top six inches of which will consist of soil suitable to sustain native vegetation. The cover soil will be seeded with indigenous grasses and cover slopes will be primarily at a 4:1 with no slopes less than 5%.

2.3 CAPACITY OF SITE IN VOLUME AND TONNAGE

The approximate Landfill capacity and projected life by Phase are presented in the following summary table:

Landfill Cell	Waste Volume (cubic yards)	Capacity (tons of waste)	Projected Phase Life (years at 2% growth)
1	28,897	14,449	
2	37,753	18,877	
3	237,619	118,809	Phase A – 11 to12 years
4	31,009	15,504	
5	107,355	53,678	
6	213,944	106,972	Phase B – 8 to 9 years
TOTAL	**656,574**	**328,289**	**Total Life – 20 years**

The detailed analysis of the Landfill life is presented in Appendix D.

2.4 FINAL INSPECTION

A final inspection will be performed at the Landfill site at the termination of landfilling activities. The final inspection will determine if the Landfill meets all the closure requirements as outlined in the permit and closure plans. The final inspection will be conducted by members of the State of Utah DSHW and Dixie Waste Services.

3.0 – POST-CLOSURE CARE PLAN

3.1 SITE MONITORING

There are no post-closure monitoring requirements for groundwater or gas at the Landfill since it is a Class VI facility. However, other physical aspects of the Landfill will be monitored on a quarterly basis.

Landfill topography shall be visually checked for depressions that could result in ponding or rapid erosion. Irregularities in the surface of the final cover will be regraded and revegetated as needed to protect the surface from erosion and to eliminate ponding.

Side slopes will be maintained or reestablished with a maximum gradient of 4:1 and the top slopes will be maintained at no less than 5% to prevent ponding. The frequency of monitoring may be reduced only after a successful demonstration to the Executive Secretary that the closed Landfill has stabilized.

During post-closure, run-off from the covered Landfill will be directed toward ditches constructed to collect and transport run-off to the storm water detention pond. The ditches will be inspected quarterly through the post-closure period. Repairs to the ditches and storm water detention pond will be completed as part of the maintenance activities.

3.2 CHANGES TO RECORD OF TITLE, LAND USE AND ZONING

The Washington County Recorder will be provided plats and a statement of fact concerning the location of any disposal site no later than 60 days after certification of closure. If necessary, the closed Landfill will be rezoned to conform to the existing Washington County zoning regulations after final closure. A description of the Landfill history and filled areas will be permanently appended to the record of title. Land use restrictions will be assigned to the site in compliance with existing regulations for closed landfills at the time of closure.

3.3 MAINTENANCE

Post-closure maintenance activities will be designed and implemented under the direction of a licensed professional engineer in response to results of inspections. Design decisions will be made after the first post-closure quarterly inspection and implemented within 30 days after identification of maintenance issues. Results of post-closure maintenance shall be reported to the Executive Secretary by a professional engineer licensed in the State of Utah.

Because of the arid climate in Washington County, maintenance of final covers and run-on/run-off systems should be minimal. Final cover and control structures will be inspected quarterly as indicated previously.

Run-on/run-off control structures and final covers could be damaged by an unusually intense storm. Consequently, an unscheduled inspection will be required after any occurrence of a 25-year storm event within a five-mile radius of the site. If the post-storm inspection discloses damage, it will be appraised by a licensed engineer. The engineer will solicit bids if necessary and supervise repairs completed by Dixie Waste Services or a licensed contractor. Funds for payment for the repair work will be disbursed from the Financial Assurance Plan after approval by the Executive Secretary.

3.4 POST-CLOSURE CONTACTS

Dixie Waste Services..... (435) 673-5610

4.0 – FINANCIAL ASSURANCE

4.1 CLOSURE COSTS

The Landfill is planned to be closed in two events; one after Cell 3 is filled and the second after Cell 6 is filled. The closure cost estimates were based on the cost to close these projected final areas, including the cost of obtaining, moving and placing the cover material, final grading, placing topsoil, fertilizing and seeding.

4.2 POST CLOSURE CARE COSTS

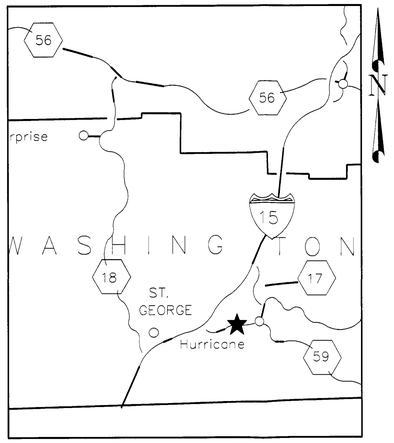
The post-closure estimate must be the cost for completing care reasonably expected during the 30-year post-closure period. These tasks include site inspections, maintenance, and record keeping.

4.3 FINANCIAL ASSURANCE MECHANISM

The estimated amount required for financial assurance is presented in Appendix E.

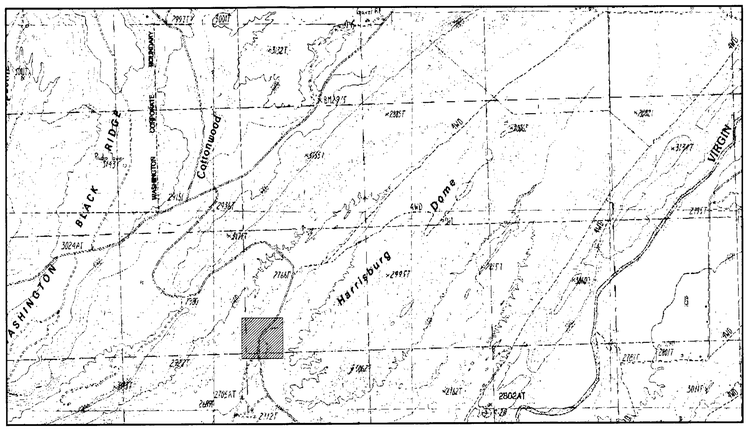
APPENDIX A

ONP LLC
(PURGATORY LANDFILL)



LOCATION MAP

NOT TO SCALE



0 1000 2000 4000
SCALE IN FEET

VICINITY MAP

INDEX

0 250 500 1000
SCALE IN FEET

SITE MAP

ONP
L.L.C.
P.O. BOX 910278
ST. GEORGE, UT 84791-02780
(435) 673-5610

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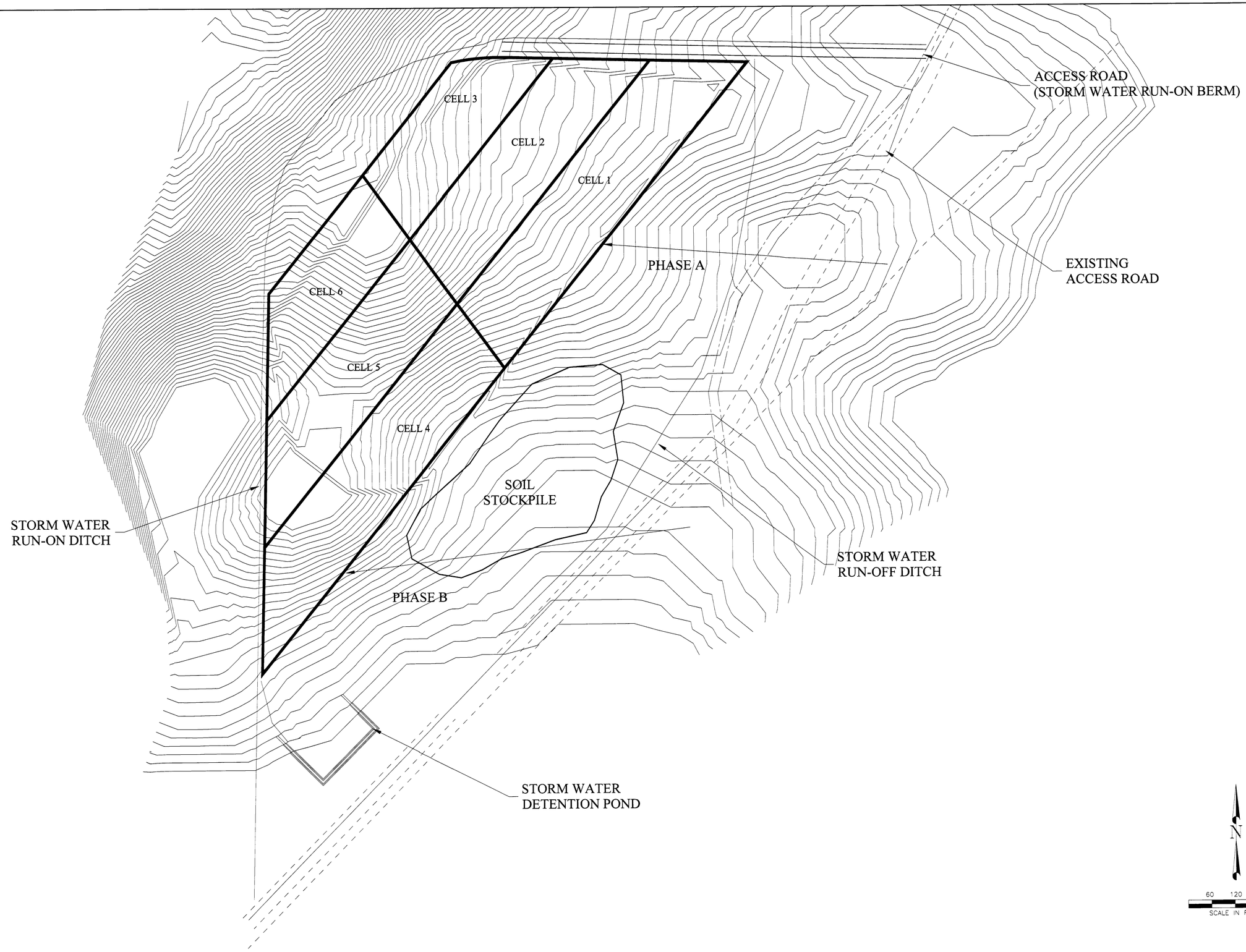
MARK	DATE	DESCRIPTION
	10/8/04	PERMIT

ISSUE:

SHEET TITLE

TITLE SHEET

1



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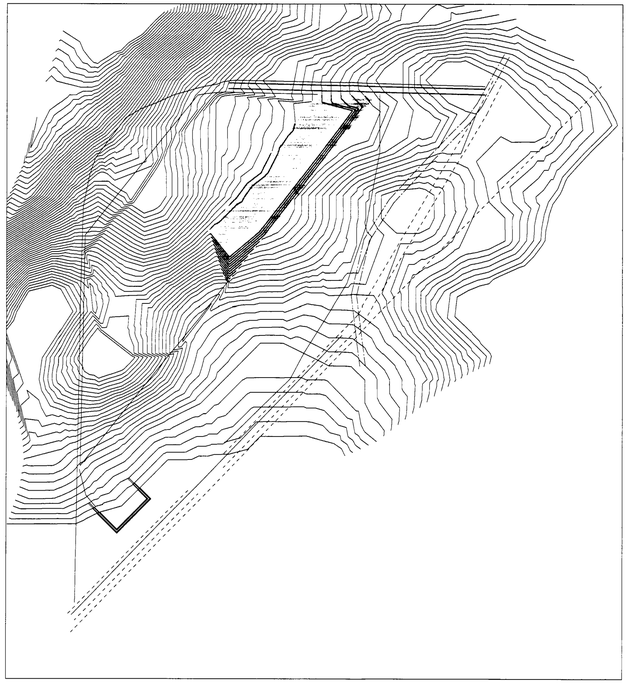
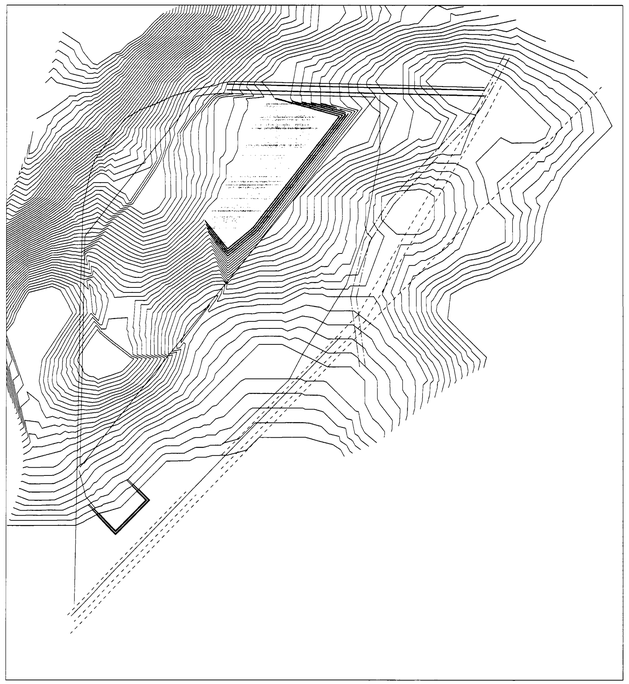
SHEET TITLE

GENERAL ARRANGEMENT

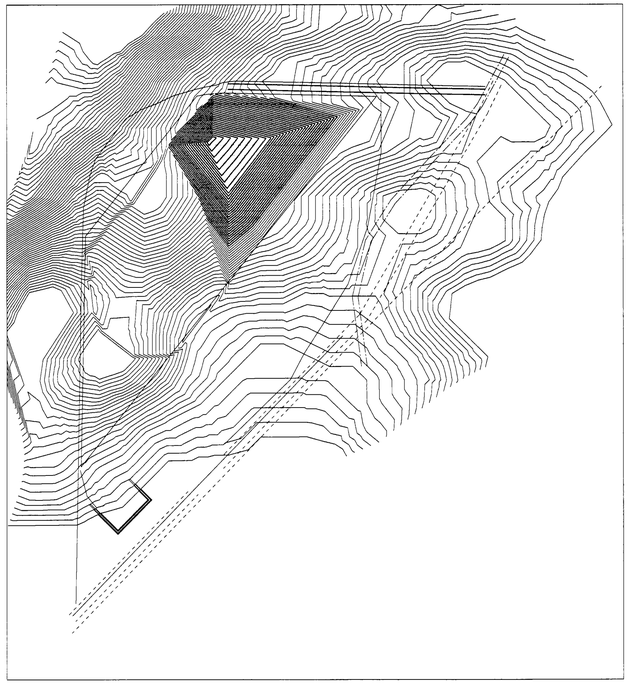
2



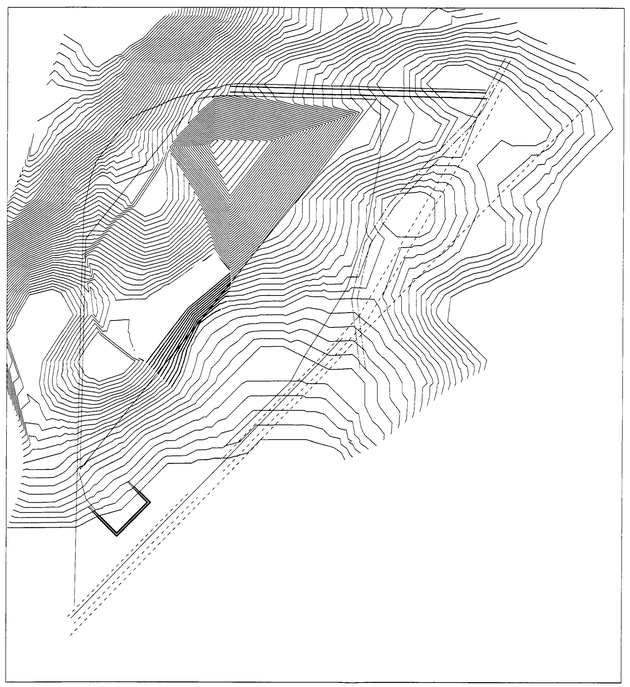
PHASE A - CELL 1 (28,897 CY)



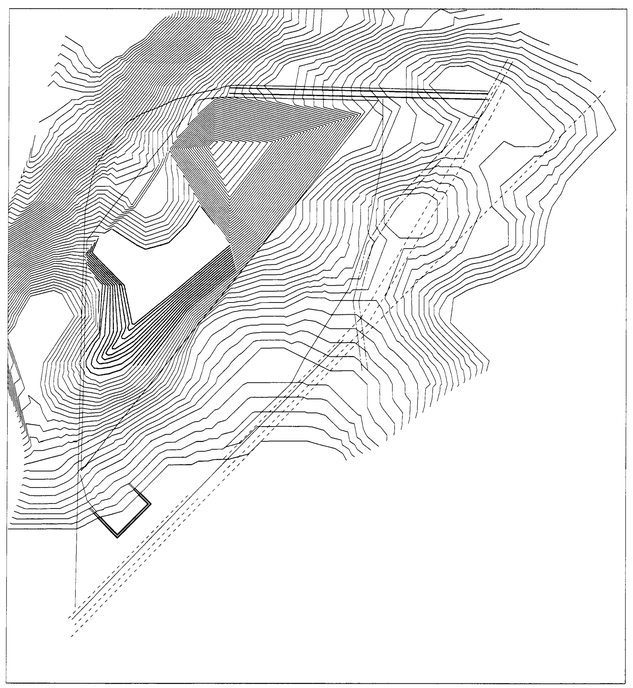
PHASE A - CELL 2 (37,753 CY)



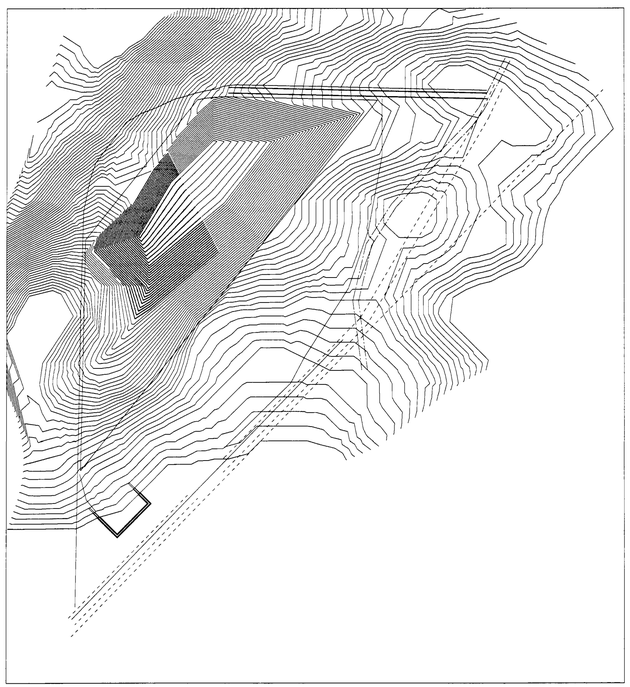
PHASE A - CELL 3 (237,620 CY)



PHASE B - CELL 4 (31,010 CY)



PHASE B - CELL 5 (107,355 CY)



PHASE B - CELL 6 (213,944 CY)
TOTAL LANDFILL CAPACITY 656,574 CY

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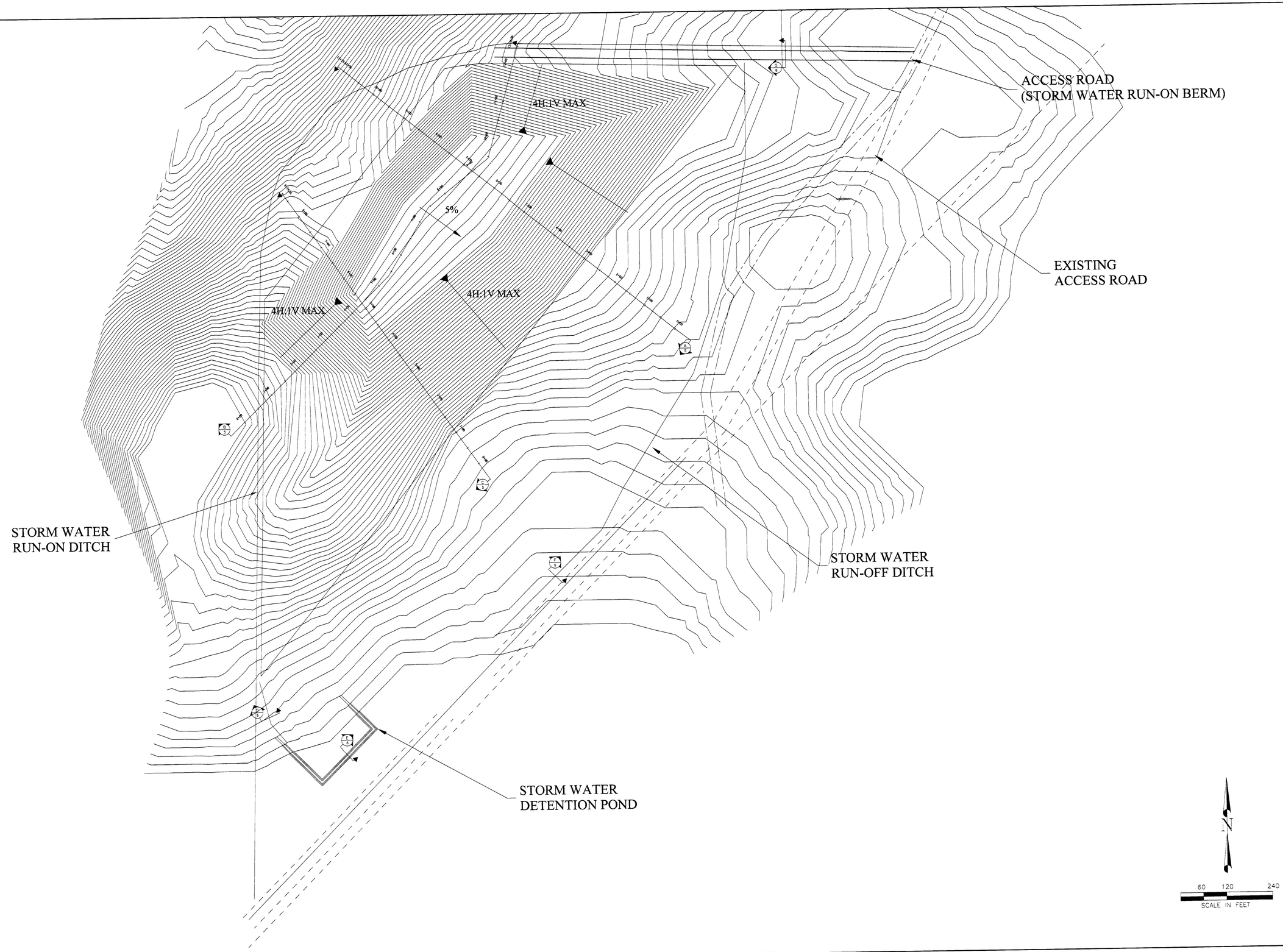
SHEET TITLE

LANDFILL DEVELOPMENT

3



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SHEET TITLE

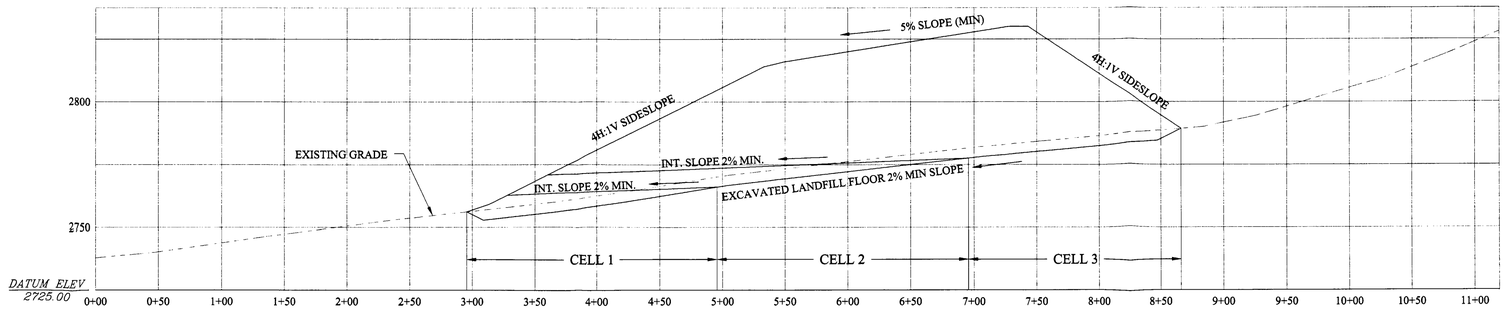
FINAL COVER

4

N

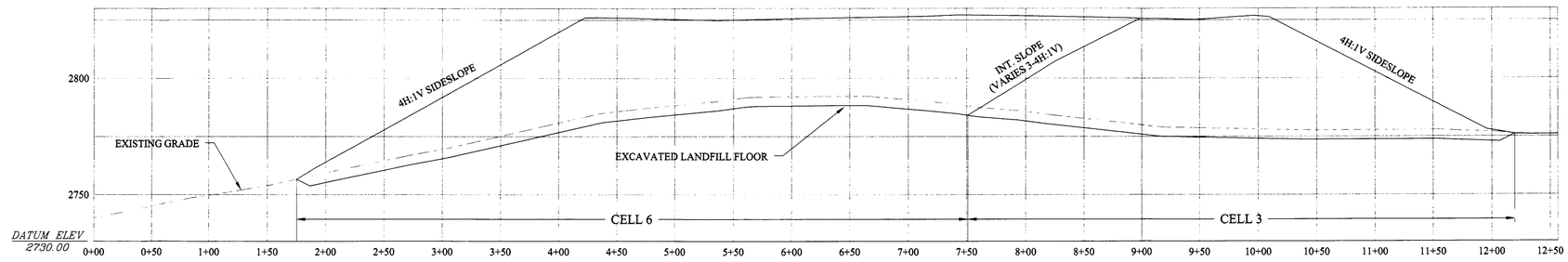
60 120 240

SCALE IN FEET



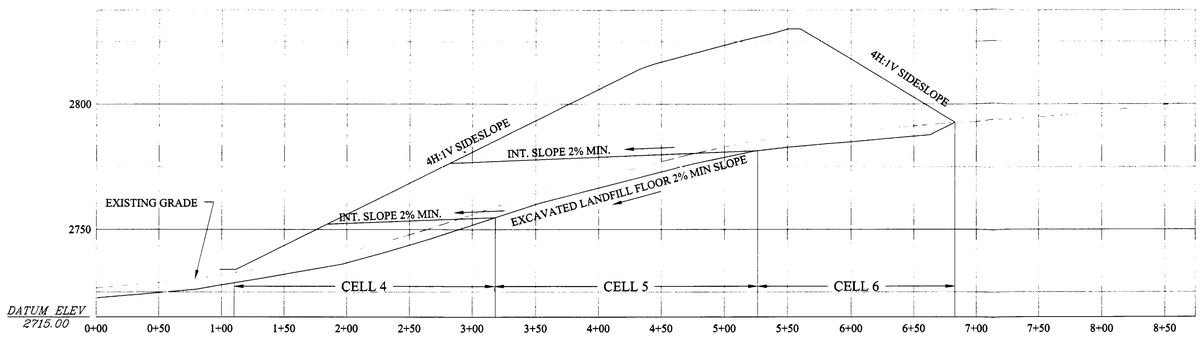
A/4

SECTION A



B/4

SECTION B



C/4

SECTION C

30 60 120

HORIZONTAL SCALE IN FEET
(2X VERTICAL EXAGGERATION)

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P.O. BOX 910278
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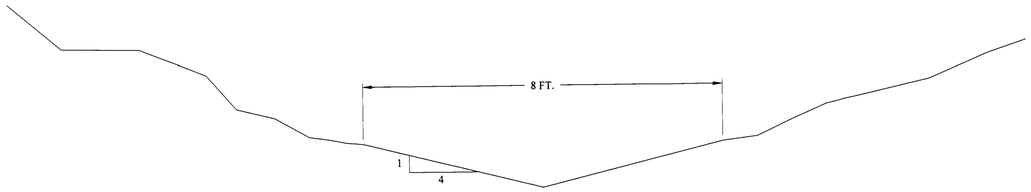
MARK	DATE	DESCRIPTION
	10/8/04	PERMIT

ISSUE:

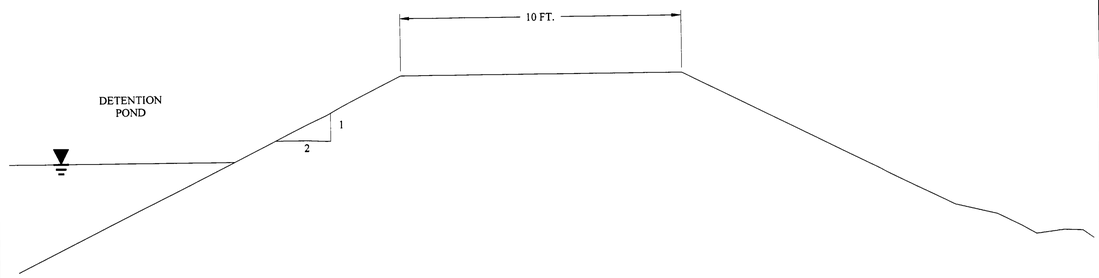
SHEET TITLE

SECTION VIEW

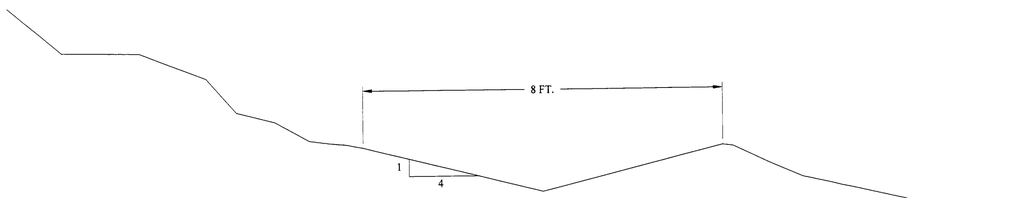
5



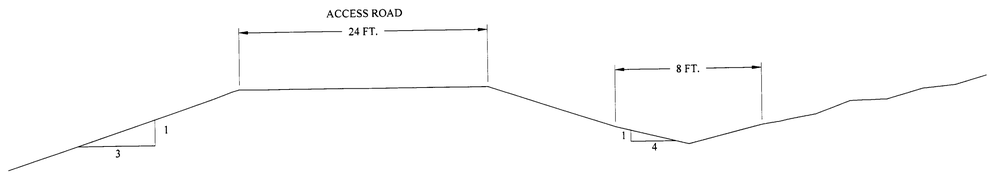
D/4 DETAIL D (NTS)
STORM WATER RUN-ON DITCH



E/4 DETAIL E (NTS)
STORM WATER DETENTION POND BERM



F/4 DETAIL F (NTS)
STORM WATER RUN-OFF DITCH



G/4 DETAIL G (NTS)
ACCESS ROAD WITH RUN-ON DITCH

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MARK	DATE	DESCRIPTION
	10/8/04	PERMIT

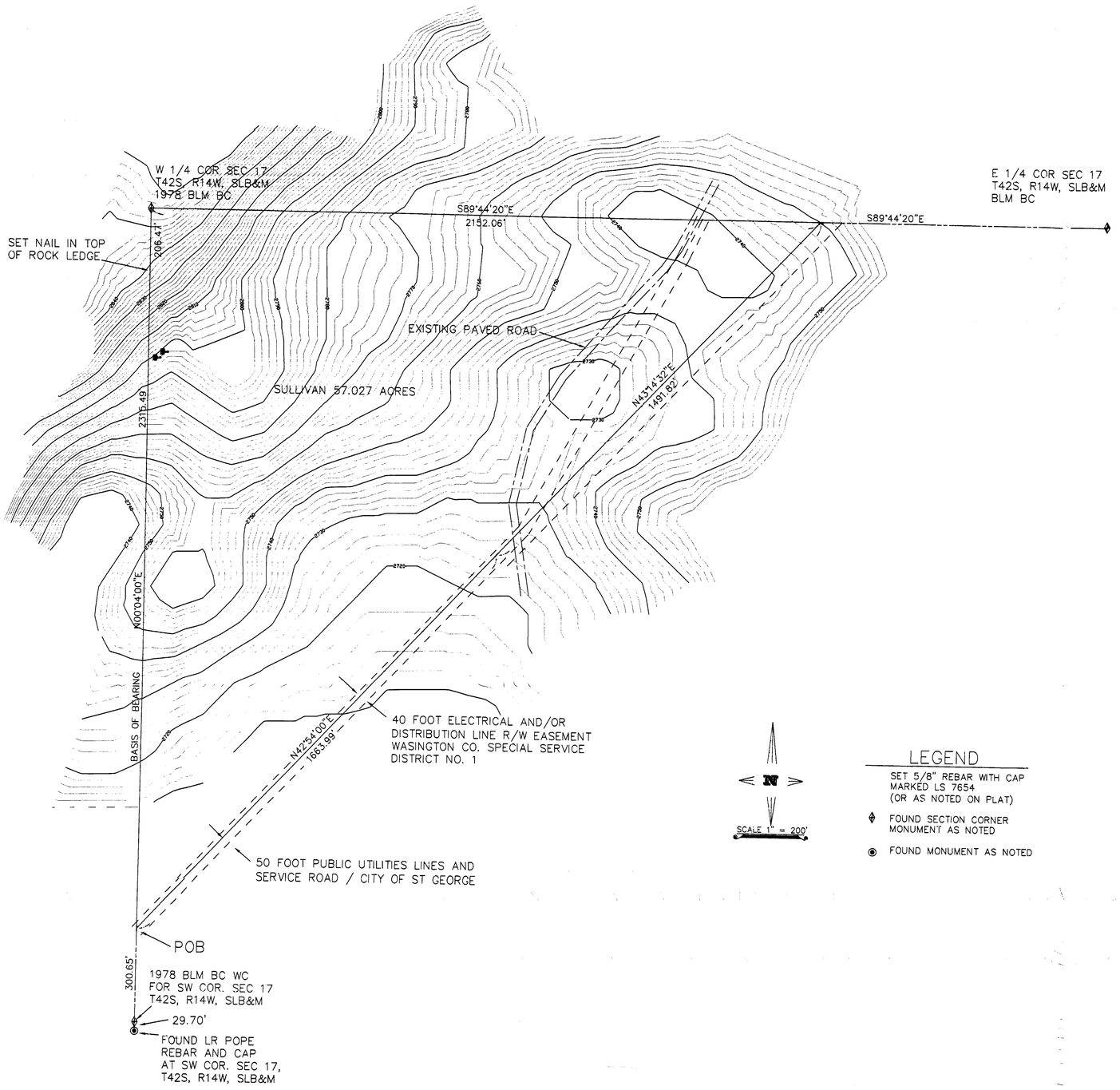
ISSUE:

SHEET TITLE

DETAILS

6

APPENDIX B



N

SCALE 1" = 200'

LEGEND

- SET 5/8" REBAR WITH CAP MARKED LS 7654 (OR AS NOTED ON PLAT)
- FOUND SECTION CORNER MONUMENT AS NOTED
- FOUND MONUMENT AS NOTED

SURVEYOR'S CERTIFICATE

I, KEVAN L. BUNDY, DO HEREBY CERTIFY THAT I AM A LICENSED LAND SURVEYOR, THAT I HOLD CERTIFICATE No. 177128 AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH AND THAT I HAVE MADE A SURVEY OF THE HEREON DESCRIBED LAND.

PROFESSIONAL LAND SURVEYOR
No.177128
KEVAN L.
BUNDY
STATE OF UTAH

KEVAN L. BUNDY PLS No. 177128

DESCRIPTIONS

BEGINING AT A POINT N 0°04'00" E, 330.35 FEET ALONG THE SECTION LINE FROM THE SOUTHWEST CORNER OF SECTION 17, T42S, R14W, SLB&M, SAID POINT BEING ON THE NORTHERLY LINE OF AN EXISTING PUBLIC UTILITY AND SERVICE ROAD EASEMENT, RUNNING THENCE N 42°54'00" E, 1663.99 FEET ALONG SAID NORTHERLY LINE OF SAID EASEMENT; THENCE N 43°14'32" E, 1491.82 FEET ALONG SAID NORTHERLY LINE OF SAID EASEMENT TO THE EAST–WEST CENTER SECTION LINE OF SAID SECTION 17; THENCE N 89°44'20" W, 2152.06 FEET ALONG SAID CENTER SECTION LINE TO THE WEST 1/4 CORNER OF SAID SECTION 17; THENCE S 0°04'00" W, 2315.49 FEET ALONG THE SECTION LINE TO THE POINT OF BEGINNING. CONTAINING 57.027 ACRES.

THE ABOVE DESCRIBED PARCEL IS SUBJECT TO THE FOLLOWING 40 FOOT WIDE ELECTRIC TRANSMISSION AND/OR DISTRIBUTION LINE RIGHT OF WAY EASEMENT IN FAVOR OF WASHINGTON COUNTY SPECIAL SERVICE DISTRICT NO. 1, AS RECORDED IN BOOK 563, PAGES 366–368 OF THE WASHINGTON COUNTY RECORDERS OFFICE, THE CENTERLINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT N 0°04'00" E, 321.98 FEET ALONG THE SECTION LINE FROM THE SOUTHWEST CORNER OF SECTION 17, T42S, R14W, SLB&M, RUNNING THENCE N 42°59'00" E, 1788.43 FEET TO A POINT ON THE NORTHEAST SIDE OF AN EXISTING ROADWAY; THENCE N 29°20'05" E, 1015.34 FEET; THENCE N 25°23'50" E, 135.39 FEET TO A POINT ON THE EAST–WEST CENTER SECTION LINE OF SAID SECTION 17.

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO MONUMENT THE HEREON DESCRIBED PARCEL, DETERMINE PARCEL ACREAGE, AND GENERATE LEGAL DESCRIPTION FOR THE PARCEL. THE BASIS OF BEARING FOR THIS SURVEY IS N 0°04'00" E ALONG THE SECTION LINE BETWEEN THE WITNESS CORNER FOR THE SOUTHWEST CORNER AND THE W 1/4 CORNER OF SECTION 17, T42S, R14W, SLB&M.

BUNDY SURVEYING INCORPORATED
935 NORTH 1300 WEST #8, ST. GEORGE, UTAH 84770
(435) 673-9254 / (435) 619-1990 / kbundy@infowest.com

SURVEY LOCATION:	SURVEY DATE:
SW 1/4 SECTION 17, T42S, R14W, SLB&M	MARCH 2004

REQUESTED BY:

DIXIE WASTE SERVICES

WHEN RECORDED MAIL DEED AND TAX NOTICE TO:

Stacey Hughes
5695 North 1070 West
St. George, Utah 84770

00915623 Bk 1695 Pg 1902
RUSSELL SHIRTS & WASHINGTON CO RECORDER
2004 DEC 10 11:56 AM FEE $16.00 BY ARH
FOR: SOUTHERN UTAH TITLE CO

Order No. 120974
Tax I.D. No. 4187-A-2

Space Above This Line for Recorder's Use

WARRANTY DEED

NED SULLIVAN AND GERALDINE SULLIVAN, as Co-Trustees of the SULLIVAN FAMILY TRUST; LELAND MERLIN SULLIVAN AND TANA S. SULLIVAN, Trustees, of the SULLIVAN REVOCABLE TRUST under Agreement dated April 21, 1999; and KARMA S. SORENSON AND JANICE SORNBERGER, grantor(s), of Leeds, County of Washington, State of Utah, hereby

CONVEY and WARRANT to

Stacey Hughes, as to an undivided 2/3 interest, and Cory Hughes, as to an undivided 1/3 interest, grantee(s) of St. George, County of Washington, State of Utah, for the sum of

TEN DOLLARS AND OTHER GOOD AND VALUABLE CONSIDERATION

the following described tract of land in WASHINGTON County, State of UTAH:

Beginning at a point North 0°04'00" East, 330.35 feet along the Section line from the Southwest Corner of Section 17, Township 42 South, Range 14 West, Salt Lake Base and Meridian, said point being on the Northerly line of an existing public utility and service road easement, running thence North 42°54'00" East, 1663.99 feet along said Northerly line of said easement; thence North 43°14'32" East, 1491.82 feet along said Northerly line of said easement to the East-West Center Section line of said Section 17; thence North 89°44'20" West, 2152.06 feet along said Center Section line to the West Quarter Corner of said Section 17; thence South 0°04'00" West, 2315.49 feet along the Section line to the point of beginning.

TOGETHER WITH all improvements and appurtenances thereunto belonging.

SUBJECT TO easements, rights of way, restrictions, and reservations of record and those enforceable in law and equity.

WITNESS the hand(s) of said grantor(s), this 1st day of December, A. D. 2004.

Janice Sornberger
Janice Sornberger

Karma S. Sorenson
Karma S. Sorenson

Sullivan Family Trust

Ned Sullivan
Ned Sullivan, Co-Trustee

Geraldine Sullivan
Geraldine Sullivan, Co-Trustee

Sullivan Revocable Trust dated 4/21/99

Leland Merlin Sullivan
Leland Merlin Sullivan, Trustee

Tana S. Sullivan
Tana S. Sullivan, Trustee

NOTARY

STATE OF)
) ss
County of Adams)

On the 7th day of December, A. D. 2004 personally appeared before me, Janine Sornberger, the grantor(s) of the within instrument, who duly acknowledge to me that she executed the same.

LUPE L. GONZALES NOTARY PUBLIC STATE OF COLORADO

Lupe L. Gonzales
Notary Public

My Commission Expires: MY COMMISSION EXPIRES 10/1/2006

Notary Public residing at:

SEE ATTACHED NOTARY ACKNOWLEDGMENT

00915623 Bk 1695 Pg 1003

This Notary Acknowledgment is attached to that certain Warranty Deed, dated December 1st, 2004 in favor of Stacey Hughes and Cory Hughes.

NOTARY

STATE OF Utah)
: ss
County of Washington)

On the 1st day of December, A. D. 2004 personally appeared before me, **NED SULLIVAN AND GERALDINE SULLIVAN, as Co-Trustees of the SULLIVAN FAMILY TRUST; LELAND MERLIN SULLIVAN AND TANA S. SULLIVAN, Trustees, of the SULLIVAN REVOCABLE TRUST** under Agreement dated April 21, 1999; and **KARMA S. SORENSON**, the signer(s) of the within instrument, who duly acknowledge to me that they executed the same.

NOTARY PUBLIC
BRAD L SEEGMILLER
40 SOUTH 100 EAST
ST. GEORGE, UT 84770
MY COMM. EXP. 12-10-04
STATE OF UTAH

Notary Public

My Commission Expires: 12-10-2004

Notary Public residing at: St George Utah

APPENDIX C

Purgatory Landfill

Site Inspection Form

DATE OF INSPECTION: _____

LANDFILL AREA: _____

PERSONNEL ON SHIFT: _____

_____

GENERAL SITE CONDITIONS: _____

_____

_____

_____

_____

SPECIFIC CONDITIONS:

Closed Cover Condition: _____

Daily Cover: _____

Run-On Structures: _____

Run-Off Structures: _____

Fences: _____

Site Structures: _____

CORRECTIVE ACTION REQUIRED: _____

_____

_____

_____

_____

Signature of Inspector

Purgatory Landfill

Random Load Inspection

Date of Inspection: _____

Owner of Load: _____

Address of Owner: _____

Description of Materials in Load:

_____

_____

_____

_____

_____

_____

Approximate Quantity of Load:

_____ Tons

_____ Cu. Yds.

_____

Signature of Owner / Carrier

_____

Signature of Inspector

Purgatory Landfill

Daily Log

Date: _____

Load #	Time	Vehicle Identification	Size of Load (Cu. Yds.)	Type of Waste	Charge
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

_____

Signature of Inspector

APPENDIX D

	Year	Estimated Annual C&D Wastestream @ 2% Escalation (Tons)	Cumulative C&D Wastestream @ 2% Escalation (Tons)	Estimated Annual C&D Wastestream @ 2% Escalation (Cu. Yds.)	Cumulative C&D Wastestream @ 2% Escalation (Cu. Yds.)	Remaining Landfill Vol. (Cu Yds)
						558,000 *
PHASE A	2005	11,000	11,000	22,000	22,000	536,000
PHASE A	2006	11,220	22,220	22,440	44,440	513,560
PHASE A	2007	11,444	33,664	22,889	67,329	490,671
PHASE A	2008	11,673	45,338	23,347	90,675	467,325
PHASE A	2009	11,907	57,244	23,814	114,489	443,511
PHASE A	2010	12,145	69,389	24,290	138,779	419,221
PHASE A	2011	12,388	81,777	24,776	163,554	394,446
PHASE A	2012	12,636	94,413	25,271	188,825	369,175
PHASE A	2013	12,888	107,301	25,777	214,602	343,398
PHASE A	2014	13,146	120,447	26,292	240,894	317,106
PHASE A	2015	13,409	133,856	26,818	267,712	290,288
PHASE A	2016	13,677	147,533	27,354	295,066	262,934
PHASE B	2017	13,951	161,484	27,901	322,967	235,033
PHASE B	2018	14,230	175,713	28,459	351,427	206,573
PHASE B	2019	14,514	190,228	29,029	380,455	177,545
PHASE B	2020	14,805	205,032	29,609	410,064	147,936
PHASE B	2021	15,101	220,133	30,201	440,266	117,734
PHASE B	2022	15,403	235,535	30,805	471,071	86,929
PHASE B	2023	15,711	251,246	31,421	502,492	55,508
PHASE B	2024	16,025	267,271	32,050	534,542	23,458
PHASE B	2025	16,345	283,616	32,691	567,233	-9,233

* Total Landfill Volume is approximately 657,000 Cu. Yds.
Net Landfill Volume is approximately 558,000 Cu. Yds. (15% soil use for daily and int. cover)
Annual Tons of waste is assumed to escalate at 4% per year
Total site area is approximately 57 acres - assume total strippable area is 40 acres.
Volume of soil available from 40 acres at 3.5' deep is approximately 226K Cu. Yds.

APPENDIX E

LANDFILL CLOSURE AND POST-CLOSURE COSTS

	Engineer Estimate		Contractor Bid	
Phase A Closure Costs - 2016 OR 2017				
Section 1.0 - Engineering	$4,200		$	4,200
Section 2.0 - Construction	$103,600		$	101,440
10% Contingency	$10,780			
Subtotal		$118,580		
Phase B Closure Costs - 2025				
Section 1.0 - Engineering	$9,700		$	9,700
Section 2.0 - Construction	$105,600		$	105,010
10% Contingency	$11,530			
Subtotal		$126,830		
Landfill Post-Closure Costs (30 years)		$64,350		$64,350
TOTAL LANDFILL CLOSURE AND POST-CLOSURE COSTS		$309,760	$	284,700

PHASE A - LANDFILL CLOSURE COSTS

Section 1.0 - Engineering — **PHASE A**

(ESTIMATED DATE OF CLOSURE= 2007, AREA= 945,000 FT SQ)

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
1.1	Topographic Survey	LS	$0	0	$0
1.2	Boundary Survey for Closure	NA	$0	0	
1.3	Site Evaluation	NA	$0	0	$0
1.4	Development of Plans (Cover and Gas Collection)	LS	$1,000	1	$1,000
1.5	Contract Administration - (Bidding and Award)	LA	$0	0	$0
1.6	Administrative Costs - (Certification of Final Cover and Closure Notice)	LS	$0	1	$0
1.7	Project Management - (Construction Observation and Testing)	LS	$3,200	1	$3,200
1.8	Monitor Well Consultant Cost	NA	$0	0	$0
1.9	Other Environmental Permit Costs	NA	$0	0	$0
				Engineering Subtotal	$4,200

Section 2.0 - Construction — **PHASE A**

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
2.1	**Final Cover System**				
2.1.1	*Site Preparation/ Site Regrading*	ACRE	$1,000	10 0	$10,000
2.1.2	*Gas Collection Layer/Pipes*	Included below			$0
2.1.3	*Low permeability Layer (Soil - If Applicable)*				
a	Soil Purchase	NA			$0
b	Soil Processing (load)	NA			$0
c	Soil Transportation	NA			$0
d	Soil Placement	NA			$0
e	Soil Amendment (compact)	NA			$0
2.1.4	*Low permeability Layer (Synthetic - If Applicable)*				
a	Geotextile	NA			$0
b	GCL	SQ FT	$0.00	0	$0
c	Geomembrane (HDPE,PVC,LLDPE,etc)	SQ FT	$0.00	0	$0
2.1.5	*Drainage Layer (Soil - If Applicable)*				
a	Geotextile	NA			$0
b	Sand/Gravel	NA			$0
2.1.6	*Drainage Layer (Synthetic - If Applicable)*				
a	Geotextile	NA			$0
b	Geonet/Geocomposite	SQ FT	$0.00	0	$0
2.1.7	*Erosion Protection Soil Layer*				
a	Soil Purchase	NA			$0
b	Soil Processing (load)	CY	$0.50	24,200	$12,100
c	Soil Transportation	CY	$1.00	24,200	$24,200
d	Soil Placement	CY	$0.75	24,200	$18,150
e	Soil Amendment (compact)	CY			$0
2.1.8	*Topsiol Layer*				
a	Soil Purchase	NA			$0
b	Soil Processing (load)	CY	$0.50	8,067	$4,033
c	Soil Transportation	CY	$1.00	8,067	$8,067
d	Soil Placement	CY	$0.75	8,067	$6,050
e	Soil Amendment	NA			$0
2.1.9	*Revegetation*				
a	Seeding	ACRE	$800	10 0	$8,000
b	Fertilizing	ACRE	$800	10 0	$8,000
c	Mulch	ACRE	$200	10 0	$2,000
d	Tacifier	ACRE	$200	10 0	$2,000
2.2	**Stormwater Protection Structures**				
a	Culverts	NA			$0
b	Pipes	NA			$0
c	Ditches/Berms	FT	$0	0	$0
d	Detention Basins	NA			$0
2.3	**Gas Collection System**				
a	Design	Included In Section 1 0			$0
b	Additional Gas Collection Wells and Connection	EA	$0	0	$0
2.4	**Leachate Collection System**				
a	Design	NA			$0
b	Additional Equipment / Installation	NA			$0
2.5	**Groundwater Monitoring System**				
a	Monitor Well Installation	NA			$0
b	Monitor Well Abandonment	NA			$0
2.6	**Site Security**				
a	Lighting, signs, etc	NA			$0
b	Fencing and Gates	NA			$0
2.7	**Miscellaneous**				
a	Performance Bonds	LS	$0	0	$0
b	Contract/Legal fees	LS	$1,000	1	$1,000
				Construction Subtotal	$103,600

LS - LUMP SUM
NA - NOT APPLICABLE
EA - EACH
CY - CUBIC YARD
FT - FEET

Total	$107,800
10% Contingency	$10,780
Subtotal Closure Cost	$118,580

PHASE B - LANDFILL CLOSURE COSTS

Section 1.0 - Engineering **PHASE B**

(ESTIMATED DATE OF CLOSURE=2015, AREA=765,000 FT SQ)

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
1.1	Topographic Survey	LS	$3,500	1	$3,500
1.2	Boundary Survey for Closure	NA	$500	1	$500
1.3	Site Evaluation	NA	$0	1	$0
1.4	Development of Plans (Cover and Gas Collection)	LS	$1,000	1	$1,000
1.5	Contract Administration - (Bidding and Award)	LA	$0	1	$0
1.6	Administrative Costs - (Certification of Final Cover and Closure Notice)	LS	$1,500	1	$1,500
1.7	Project Management - (Construction Observation and Testing)	LS	$3,200	1	$3,200
1.8	Monitor Well Consultant Cost	NA	$0		$0
1.9	Other Environmental Permit Costs	NA	$0		$0
				Engineering Subtotal	$9,700

Section 2.0 - Construction **PHASE B**

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
2.1	**Final Cover System**				
2.1.1	*Site Preparation/ Site Regrading*	ACRE	$1,000	10.0	$10,000
2.1.2	*Gas Collection Layer/Pipes*	Included below			
2.1.3	*Low permeability Layer (Soil - If Applicable)*				
a	Soil Purchase	NA			$0
b	Soil Processing (load)	NA			$0
c	Soil Transportation	NA			$0
d	Soil Placement	NA			$0
e	Soil Amendment (compact)	NA			$0
2.1.4	*Low permeability Layer (Synthetic - If Applicable)*				
a	Geotextile	NA			$0
b	GCL	NA			$0
c	Geomembrane (HDPE,PVC,LLDPE,etc)	NA			$0
2.1.5	*Drainage Layer (Soil - If Applicable)*				
a	Geotextile	NA			$0
b	Sand/Gravel	NA			$0
2.1.6	*Drainage Layer (Synthetic - If Applicable)*				
a	Geotextile	NA			$0
b	Geonet/Geocomposite	NA			$0
2.1.7	*Erosion Protection Soil Layer*				
a	Soil Purchase	NA			$0
b	Soil Processing (load)	CY	$0.50	24,200	$12,100
c	Soil Transportation	CY	$1.00	24,200	$24,200
d	Soil Placement	CY	$0.75	24,200	$18,150
e	Soil Amendment (compact)	CY			$0
2.1.8	*Tonsiol Layer*				
a	Soil Purchase	NA			$0
b	Soil Processing (load)	CY	$0.50	8,067	$4,033
c	Soil Transportation	CY	$1.00	8,067	$8,067
d	Soil Placement	CY	$0.75	8,067	$6,050
e	Soil Amendment	NA			$0
2.1.9	*Revegetation*				
a	Seeding	ACRE	$800	10.0	$8,000
b	Fertilizing	ACRE	$800	10.0	$8,000
c	Mulch	ACRE	$200	10.0	$2,000
d	Tacifier	ACRE	$200	10.0	$2,000
2.2	**Stormwater Protection Structures**				
a	Culverts	NA			$0
b	Pipes	NA			$0
c	Ditches/Berms	FT	$0	0	$0
d	Detention Basins	NA			$0
2.3	**Gas Collection System**				
a	Design	Included in Section 1.0			$0
b	Additional Gas Collection Wells and Connection	LS	$0	0	$0
2.4	**Leachate Collection System**				
a	Design	NA			$0
b	Additional Equipment / Installation	NA			$0
2.5	**Groundwater Monitoring System**				
a	Monitor Well Installation	NA			$0
b	Monitor Well Abandonment	NA			$0
2.6	**Site Security**				
a	Lighting, signs, etc	NA	$1,000	1	$1,000
b	Fencing and Gates	NA	$1,000	1	$1,000
2.7	**Miscellaneous**				
a	Performance Bonds	LS		1	$0
b	Contract/Legal fees	LS	$1,000	1	$1,000
				Construction Subtotal	$105,600

LS - LUMP SUM
NA - NOT APPLICABLE
EA - EACH
CY - CUBIC YARD
FT - FEET

Total	$115,300
10% Contingency	$11,530
Subtotal Closure Cost	$126,830

Gold Wheel Construction, Inc.
925 South 1775 East
Washington, Utah 84780
(435) 674-1468
Fax (435) 652-1529

Bid Proposal
1/20/2005

Proposal Sent to:
ONP I, L.C.
St George, Utah 84791

Project Name:
Purgatory Landfill
Closure Costs
Phase A

Work to be performed	Amount	unit	cost		total	
Site Preparation						
mobilization	1	ea	$	5,000.00	$	5,000.00
Grade, compact and prep area						
Place stockpiled topsoil and compact to cover site (includes erosion control layer & top soil layer)	24000	cy	$	2.45	$	58,800.00
Soils testing and final report	1	ea	$	5,000.00	$	5,000.00
Revegitation						
Seed with approved local seed mix (Hydroseeded with fertilizer and tacifier)	408000	sf	$	0.08	$	32,640.00
TOTAL BID PRICE					$	101,440.00

Gold Wheel Construction, Inc.
925 South 1775 East
Washington, Utah 84780
(435) 674-1468
Fax (435) 652-1529

Bid Proposal
1/20/2005

Proposal Sent to:
ONP L.L.C.
St George, Utah 84791

Project Name:
Purgatory Landfill
Closure Costs
Phase 8

Work to be performed	Amount	unit	cost		total	
Site Preparation						
mobilization	1	ea	$	5,000.00	$	5,000.00
Grade, compact and prep area						
Place stockpiled topsoil and compact to cover site (includes erosion control layer & top soil layer)	25000	cy	$	2.45	$	61,250.00
Soils testing and final report	1	ea	$	5,000.00	$	5,000.00
Revegitation						
Seed with approved local seed mix (Hydroseeded with fertilizer and tacifier)	422000	sf	$	0.08	$	33,760.00
TOTAL BID PRICE					$	105,010.00

LANDFILL POST-CLOSURE COSTS (30 YEARS)

Section 1.0 - Engineering

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
1.1	**Post-Closure Plan**	NA			$0
1.2	**Annual Report** (including results from gas, leachate, and ground water sampling - details of maintenance performed)	LS	$150	30	$4,500
a	Semiannual Site Inspections	LS	$100	60	$6,000
b	Plan Update	LS	$100	30	$3,000
				Engineering Subtotal	$13,500

Section 2.0 - Gas Collection System - Sampling

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
2.1	**Sample Collection**	NA			$0
2.2	**Sample Analysis**	NA			$0
2.3	**Report** (Part of Annual Report)				
				Gas Collection System - Sampling Subtotal	$0

Section 3.0 - Leachate Collection System - Sampling

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
2.1	**Sample Collection**	NA			$0
2.2	**Sample Analysis**	NA			$0
2.3	**Report** (Part of Annual Report)				
				Leachate Collection System - Sampling Subtotal	$0

Section 4.0 - Ground Water Monitoring System - Sampling

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
3.1	**Sample Collection**	NA			$0
3.2	**Sample Analysis**	NA			$0
3.3	**Report**	NA			$0
				Ground Water Collection System - Sampling Subtotal	$0

Section 5.0 - Facility Operations and Maintenance

Item	Description	Unit Measure	Cost/Unit	No. Units	Total Cost
4.1	**Cover**				
a	Soil Replacement	LS	$500	30	$15,000
b	Vegetation/Reseeding	LS	$200	30	$6,000
4.2	**Storm Water Protection Structures**				
a	Ditch and Culvert Maintenance	LS	$200	30	$6,000
b	Berm and Basin Maintenance	LS	$200	30	$6,000
4.3	**Gas Collection System**				
a	System Operation	NA			$0
b	System Repair	NA			$0
4.4	**Leachate Collection System**				
a	System Operation	NA			$0
b	System Repair	NA			$0
4.5	**Ground Water Monitoring System**				
a	System Operation	NA			$0
b	System Repair	NA			$0
4.6	**Site Security**				
a	Lighting, signs, etc...	LS	$200	30	$6,000
b	Fencing and Gates	LS	$200	30	$6,000
4.7	**Miscellaneous**				
a					
b					
				Facility Operations and Maintenance Subtotal	$45,000

Total	$58,500
10% Contingency	$5,850
Total Post-Closure Cost	$64,350